Menlo Park Notebook #152 [N-80-01-13]

This notebook covers the period November 1880-January 1881. Most of the entries are by Francis Jehl. A few entries appear to be by Francis Upton. Included are notes and calculations relating to tests of A-lamps. There is also a note and drawing by Edison regarding a method for preventing the carrying of carbon by electricity. At the end of the book is a list of the number of sons and daughters of Edison and others. The label on the front cover is marked "Reg Lamp A" and "Francis Jehl." The label also indicates that this notebook is, in part, a "continuation of Book No 138 at p 39." The book contains 284 numbered pages.

Blank pages not filmed: 22-29, 130-269, 272-277.

LIBRARY OF THE

BOARD OF PATENT CONTROL,

120 BROADWAY, NEW YORK.

Gift of Library
of the Electric
Boat Co.
74 Broadway, N.Y.

May 1, 1896

Reg no 1 1

One hour high vac spark gone
Previous 491. Now. 182
Put up at 5.30 Nov 2 0 1880
PM
Buckled at about 3 Nov 2
1880

Reg 2
when

48 Candles for hour after spark went Res 170

Bunsen Plate clamps 5 hours Carbon ignition Extra high heat.

Put up at 2.30. Nov 19. 1850.
PM

Reg no 3

5

Back 5 hours Reg Vac Process
1 hour no spark. 191
Put in at 5.30. Nov 20 1922
Broke in at Nov 28 - 10 a.m. 1922
Carton now in the shed

Req No 4

Boat 5 hours Req & Process

1 hour no Spark 184.

Pipe WD at 5:30 Nov 20 1880

Reg. No 5

48 candles for 1 hour after
Spark R 191 Elect. Batt plate
clamp 5 hour carborundum tubes
high heat.
Put on at 2.30 Nov 19 1900
tested at 11.00 28 10 am 1900
Cool Gas round the Clamp

55

Rig no 6

Bank 5 hour Rig process
1 hr no spark 202
10 X 1 X Bank 2 17.
32 508

Put ext at 5,30 hrs 20 1480

Reg no 7 1880

after hour 2 pants gone 217
coal. impressed 455 ohms

Paid off at 5.30 Nov 20 1880

Reg No 8 1500

Put on old Reg post Nov ~~23~~ 22

103.35

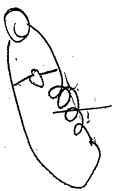
119.2 ohms

4000 ft.

No 3

b | Up to Dec. 6. 6 PM. 164 hours
32
Burned at 3½ PM Dec 8/1900 196 hours

2,466,725
2,141,521
2,141,872
6,418,260
3,058,174



Reg No 10 Page 77 book B
Permit Req Book 1,

115 R
152 C
4010 ft (lbs)

7.30 Nov 22 28

1/2 1/2

$\frac{1}{2}$ 1/2 1/2

$\frac{1}{2}$ 1/2 1/2

$\frac{1}{2}$

Reg No 9

127.2 R
109.V.
4160 ft lbs.

7.30 Nov 22
burst at the
Clark D 5 Minutes
after pulling out

$$\text{Watts} = \frac{E^2}{R}$$

$$R = \frac{E^2}{\text{Watts}} = \frac{E^2}{\frac{220 \text{ volts}}{9.47}}$$

(Reg 11)

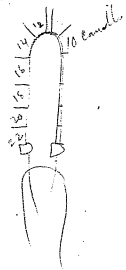
Bancroft: very light ~~[illegible]~~ vacuum
1 hour at high vacuum
distance. 9.47 per hour. finish
start glass.

Put on at 4.30 Nov 23 1880
at 16 Candles.

Removed this Reg 11 but it is
broke.

put up at 1 nov 24 at 48

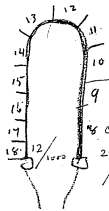
put up at 8 PM to 49 Candles
Nov 23 Edison



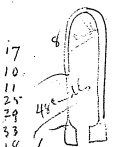
12

66
26
34
42
16 2) 13½
12 1
2 3
4

Nov 28 1880 TDS.

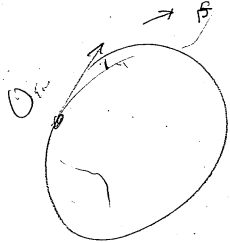


To prevent
Electrical Conveying
8 candle incandescent



11

17
10
11
25
29
33
18
11) 143 (13
1
33



Nov 28 1880 TAE

Number 10X17

3-53 Started run

3:30 P.M. 10:00 high globe entirely filled with blue very blue at clamps, with magnet

3-56 reversed

3-59 "

1-2 "

4-5 "

4-8 "

One of the clamps red blue very much less and more to be brought to the clamps by magnet. When current reversed th

heat left one clamps
from the other.

4-11 reversed

4-11-10 "

Intermittent

At varying intervals

Blue gauze and the
carbon in with clamps
heated alaska

4-15 busted

Went right above the
clamp

3005 151

3008 170

310 a 150.

25127
2) 39127
195.

311 180

2125527
127.

315 157

317 162

324 162

337 158
338 177
339 160

341	158
342	160
343	158
344	168
345	165
346	167
347	158
348	157
349	155

351	158
352	155
353	150
354	154
355	156
356	160
357	157
358	156
359	170

361	158
362	165
~~363~~	
363	160
364	150
365	168
366	156
367	159 ~~middling~~
368	168
369	159

371	158
372	163
373	164
374	158
375	161
376	353
377	165
378	156
379	169

381	168
382	160
383	150
384	152
385	155
386	158
387	155
388	148
389	159

391 157

392 no Volumen

393 163

394 155

395 158

396 165

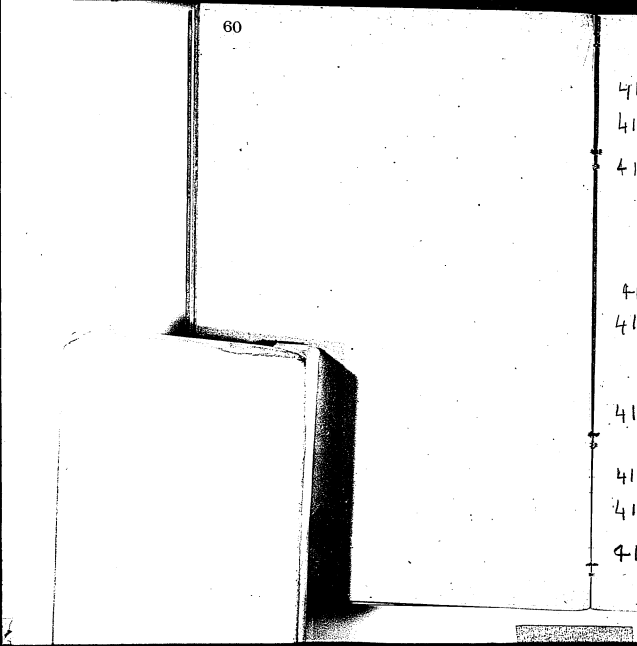
397 167 def

398 162

399 164

401	154
402	155
403	161
404	155
405	162
406	159
407	154
407	~~158~~ 158
408	153
409	163

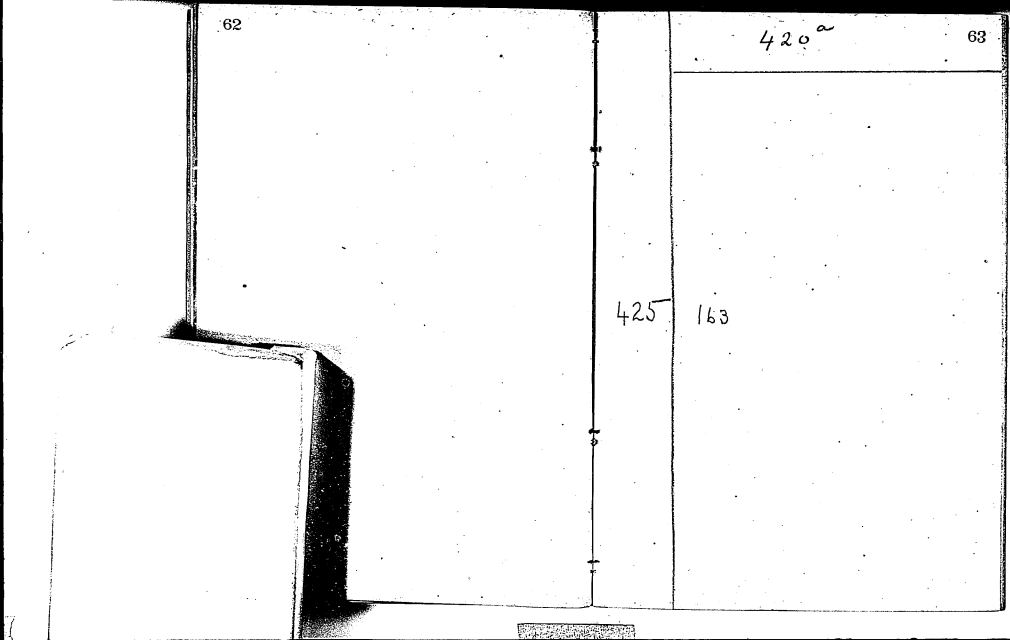
411	168
412	156
413	176
414	170
415	160
416	164
417	167
418	153
419	157



420~

425

163



433	154
434	156
435	151
436	162
374	165
438	189
439	165

441	166
442	158
443	165
444	158
445	158
446	165
447	162
448	153
449	157

451	162
452	169
453	157
455	159
454	175
456	162
457	161
458	150
459	158

461	153
462	162
463	165
464	161
465	162
466	190
467	160
468	160
469	162

471 165

472 165

473 154

474 155

475 no vacancy

476 157

477 155

478 155

479 164

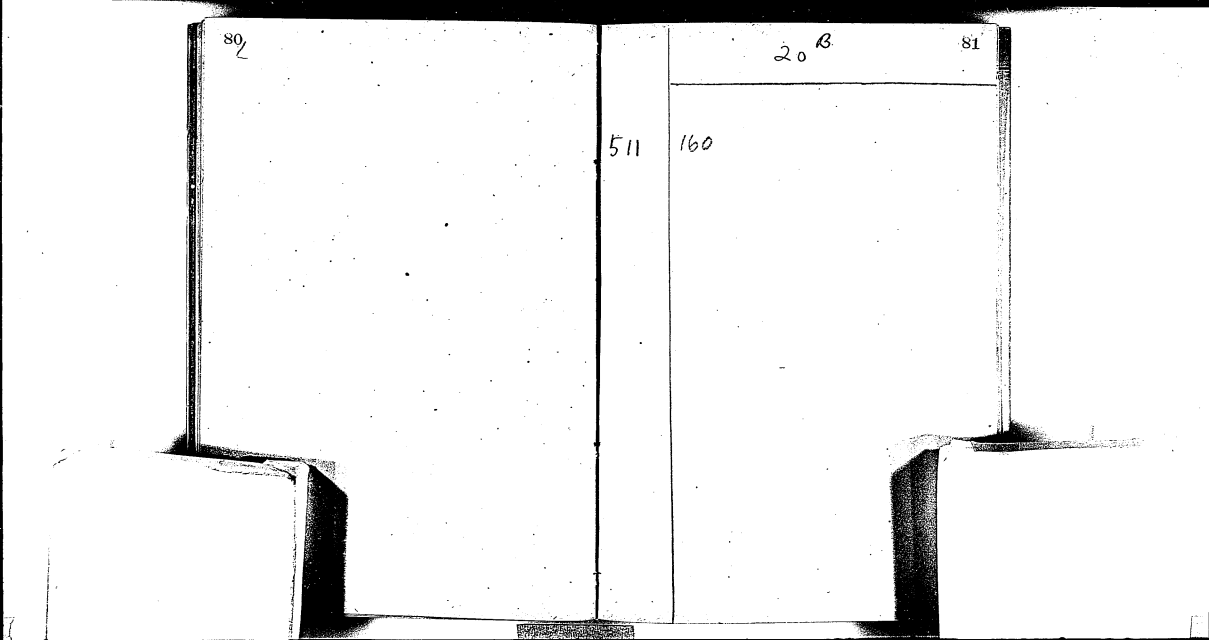
480 a 165

481	155
482	150
483	155
484	165
485	165
486	155
487	160
488	170
489	165

490 ~ 190

491	160
492	161
493	158
494	152
495	159
496	154
497	153
498	154
499	170

500	157
501	158
502	159
503	156
504	160
505	163
506	156
507	165
508	159
509	154
510	145
511	160


80
20 B
81
511
160

Went up in plow room 20 B

31	78 ✓
32	84 ✓
33	86 ✓
34	84
35	88
36	79
37	82
38	81
39	82

41 85 ✓
42 ~~83~~
43 80
44 82

45 82
46 88
47 81
48 80
49 86 ✓

57 80

52 81

53 80

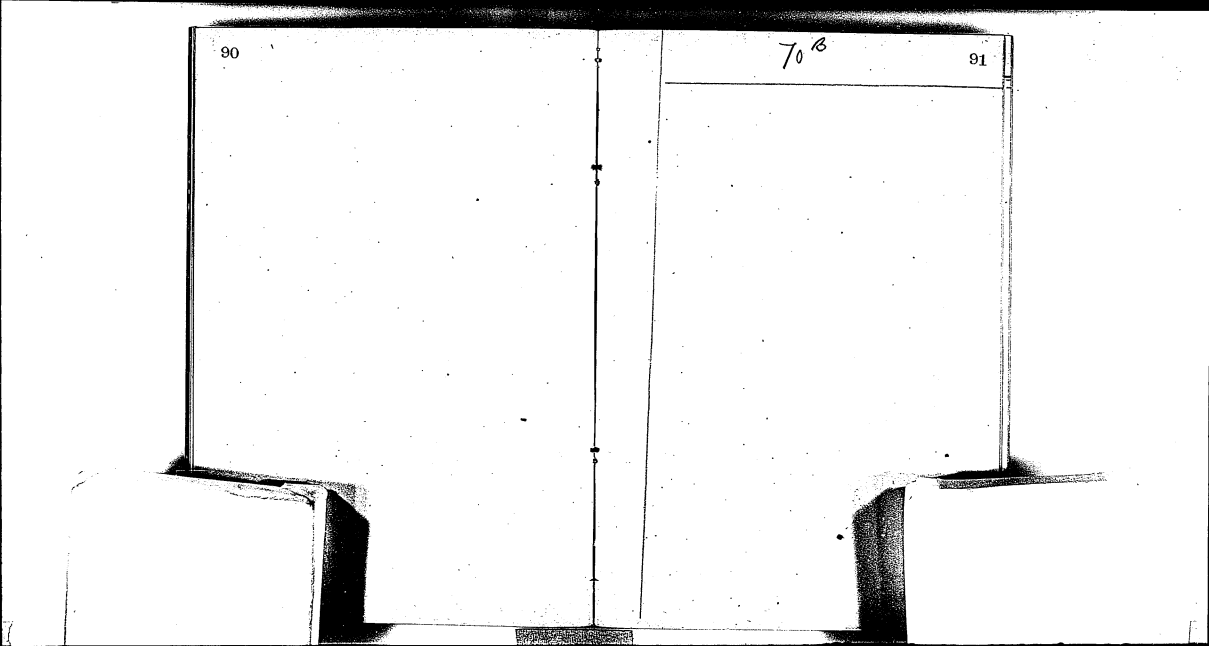
54 86 ✓

55 85 ✓

56 88

58 82

60B



520 A

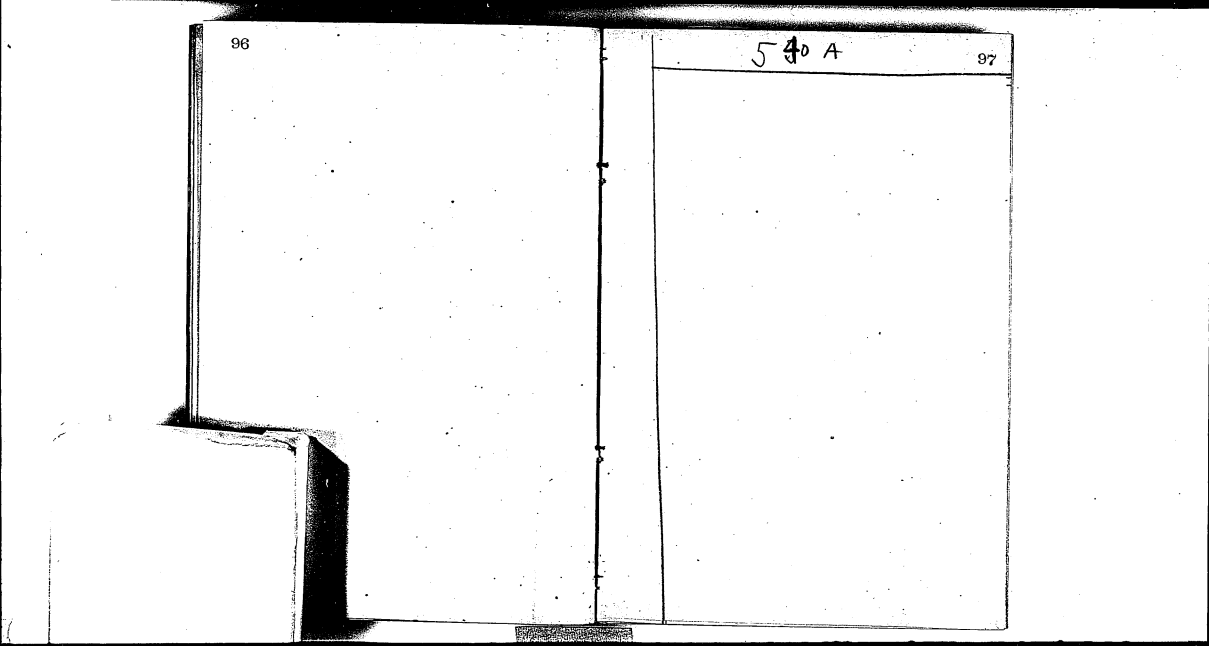
512 — 160

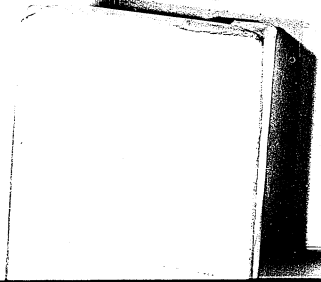
523 — 169

527 — 160

532 153
533 153

535 162
536 163



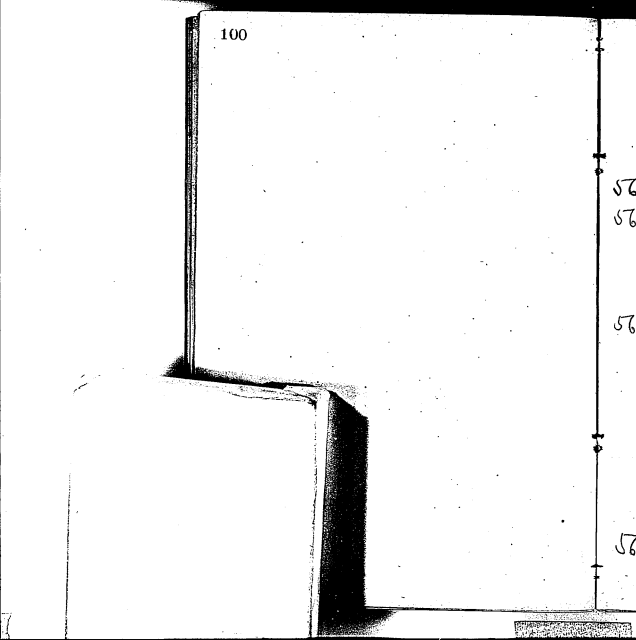


559 182.

562 166
563 165

567 167

569 -163



5

572 168

573 166–

574 164

575 163

576 160

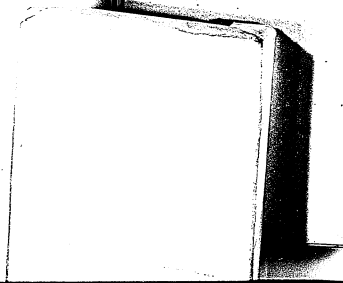
577 168

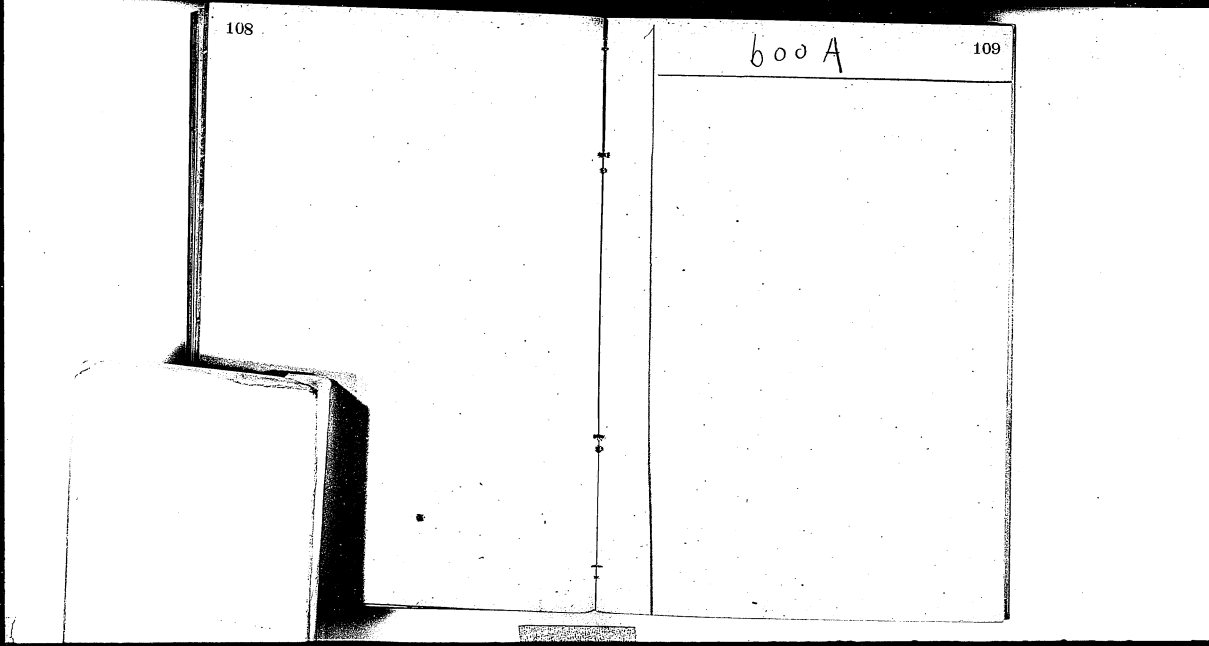
579 165

	580 A 1.63
581	Went up in Phan Room
582	155
583	167
586	143
587	163
589	168.

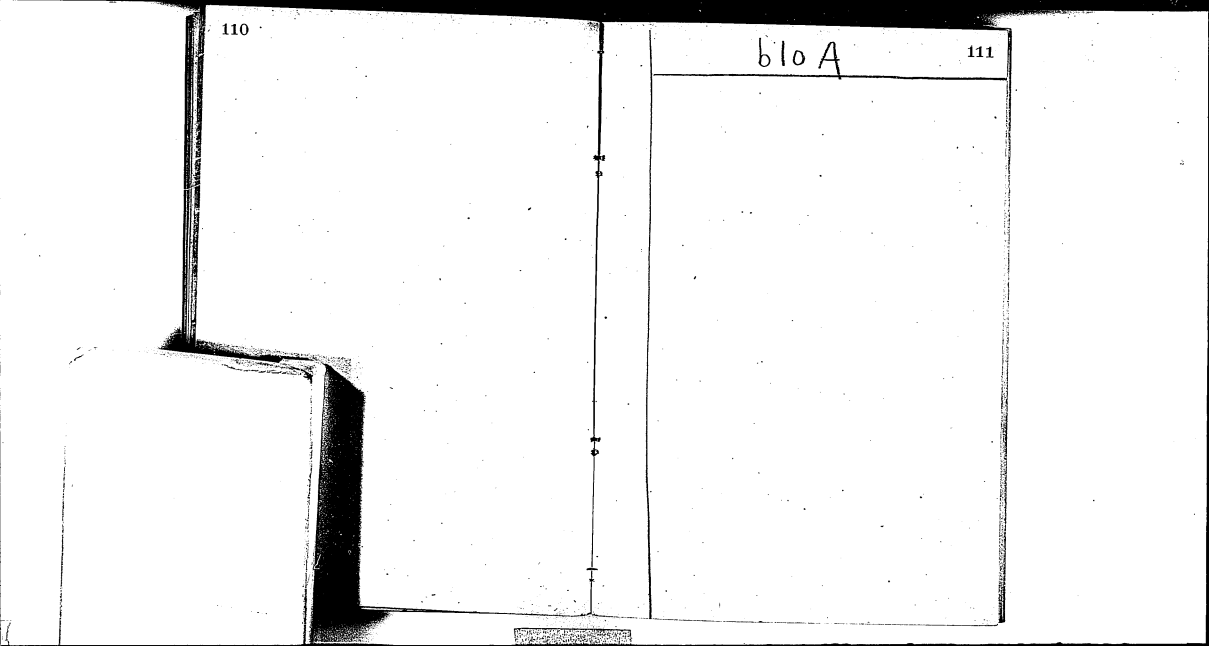
593 162

595 163.

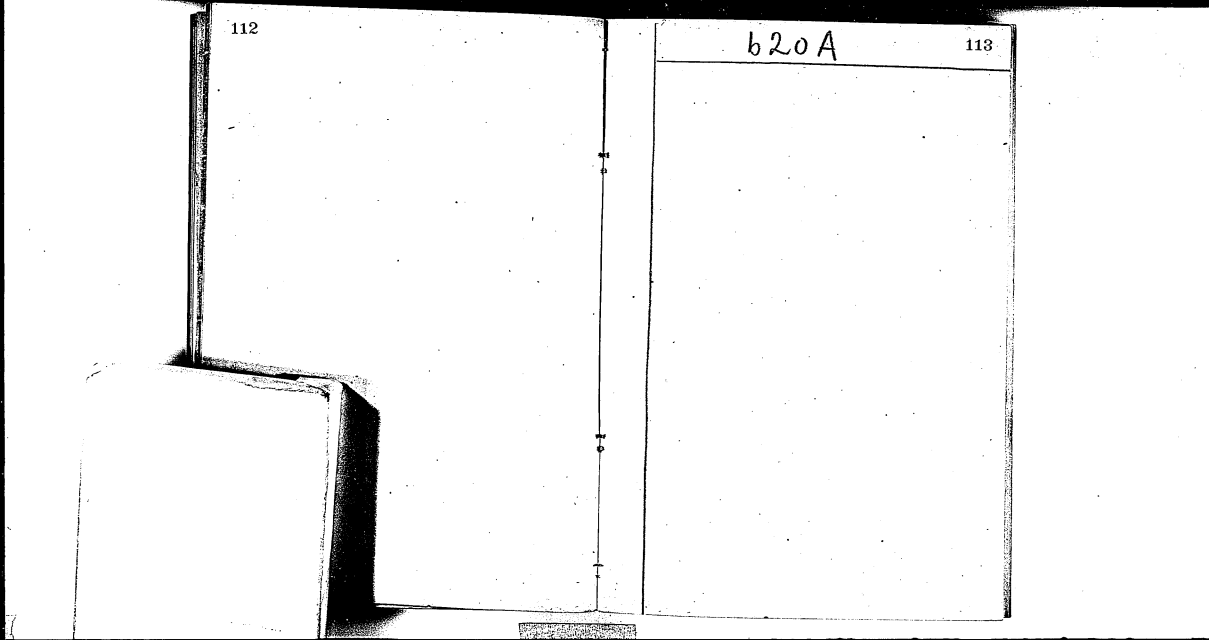


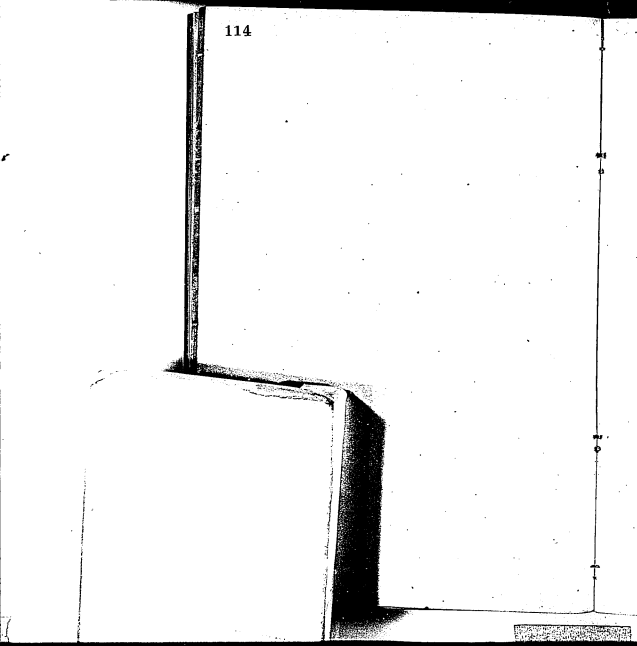


b10 A

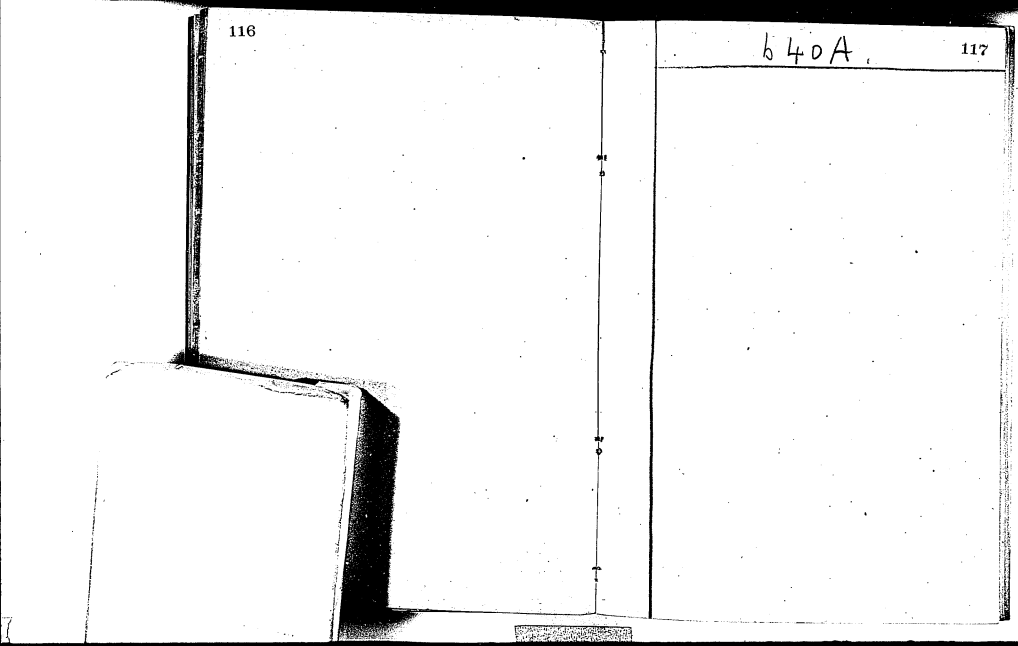


b20A

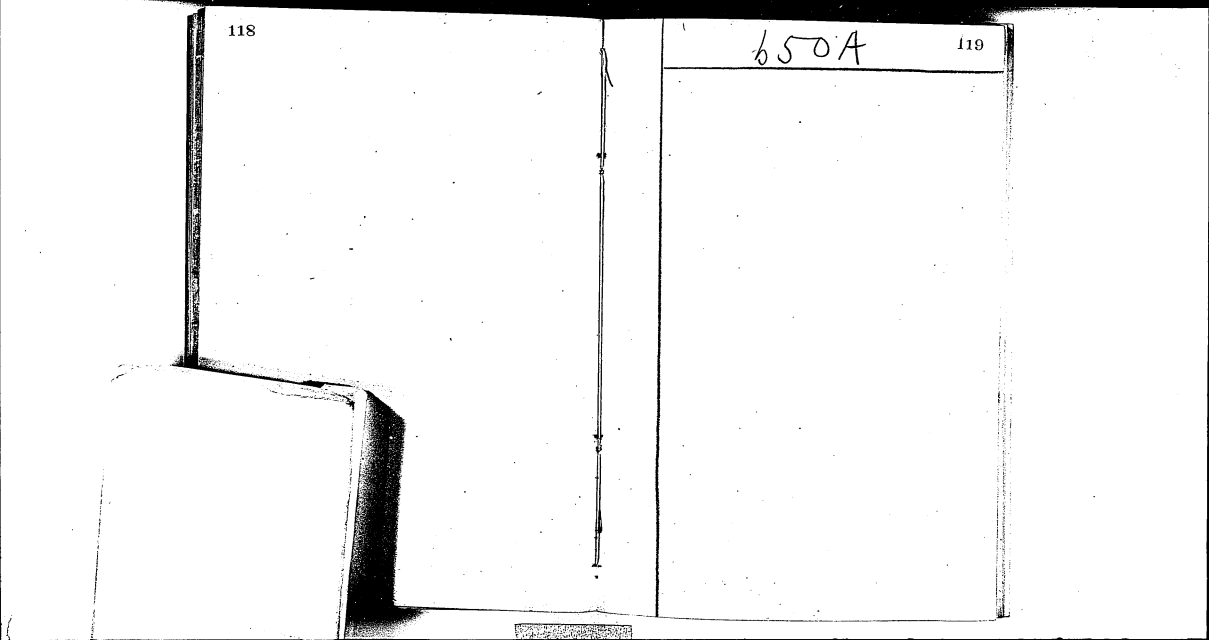




b30A



650A



11/30/80 Best 265	Def 155 at 16
11/30/80 Best 375	150 at 16
Best 289	155 at 16
~~Best~~ 266	152 at 16
Best 848	148 at 16
Best 375	153. at 16
Best 300	166 at 16

Lamps Jan 18 1888 121
Lamps from Upton to be read down system. for meals

1	102.6 volts	98.5 [illegible]
2nd	104.6 volts	101. [illegible]
5	101.25 volts	96.5 [illegible]

1 97.87 92 no

8 97.87 93.8 no

n. 102.60 no

1/2 lamp. Jan 13 1880

John

No 1 163

47.93 v

2 .164

47.93 volts

3 165

47.98 volts

4. 166.

52.65 volts

5 167
50.62 volts

6. 168
57.3 volts

7 169
48.60

8 170
52.65 volts

9. 171
56.7 volts

10 172
57.30 volts

11 173
50.60 volts

12 174
47.25 volts

13 180
50.60 volts

14 179
51.30 volts

15 178

53.32 volts

16 177

53.32 volts

17 176

47.25 volts

18 175

47.93 volts

52.65 volts

23 185

49.27 volts

22 184

47.93 volts

21 183.

47.93 volts

20 182.

54. volts

19 181

57.97 volts

29 187.

49.95 volts

28. 189

47.98 volts

27. 189.

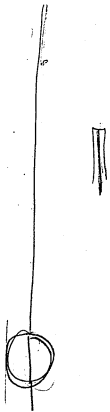
47.93 volts

26 190

57.00

25 191.

52.65 volts



1	1	105	1000 − 105 = 895
2	2		
3	3		1000 − 94 = 906
22	23	94	
			1000 − 320 = 680

680 × 320 = 217600

$\frac{680}{320} \quad \frac{X}{.0187}$

680 × .0187 = 3

895 : 105 :: X : .0187

~~906 : 94 :: X :~~

906 : 94 :: X : .0187

~~680 : 320 :: X : .0187~~

1

895
.0187
62 65
7160
895
105 | 16736 5 | 1593
105
623
525
986
945
415
315
100
105

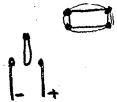
2

906
.0187
6342
7248
906
94 | 169422 | 1802
94
754
752
222
188
34
94

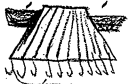
3

320 | 217600 | 680
1920
2960
2880
800
640
1600
1600

Test of Coal oil Lamp
at 48 candles ~~of the~~
to show that the com
test a coal oil Lamp
at 48 candles



	Daughters	Sons
Gen. Palmer	2	⊗
U.K. Painter	2	⊗
Dr Wm. A. Bell	2	⊗
Chas Batchelor	2	⊗
S. Bergmann	2	⊗
Ed. Johnson	2	⊗
T. A. Edison	1	⊗2
R. R. Upton	1	⊗
H. Ketchs	2	2



Bg 427. 9.6 volt
Duell 8.38

	Boys	Girls
T. A. Edison	2	1
Chas Batchelor	0	2
F. R. Upton	0	1
Wm Moses	1	2
J. L. Griffin	1	1
Mr Koussi	3.	0.
Mr Deam	1.	0
Ed. Johnson	0.	2
Mc Kenzie	18.	9+4

22) 1 Edison #110 (4c